

[CLAIMS]

[Claim 1] A dishwasher comprising:

a body having a washing chamber for washing dishes;

5 at least one rack in the washing chamber for placing dishes thereon;

at least one reader unit for sensing information on dishes on the at least one rack;

and

a control unit for controlling operation of the dishwasher with reference to
information on the dishes sensed at the reader unit.

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[Claim 2] The dishwasher as claimed in claim 1, wherein the reader unit senses
information on the dishes from information tags attached to the dishes on the at least one
rack, respectively.

15 [Claim 3] The dishwasher as claimed in claim 2, wherein the information tag
includes a RFID (Radio Frequency Identification) tag, and the reader unit includes a RF
(Radio Frequency) reader.

[Claim 4] The dishwasher as claimed in claim 2, wherein the information tag has
20 at least one kind of information on a kind of the dish, a main use of the dish, a use of the
dish served, and a shape of the dish.

[Claim 5] The dishwasher as claimed in claim 1, wherein the at least one reader

unit is provided to the at least one rack, for sensing information on the dishes respectively placed on the racks.

[Claim 6] The dishwasher as claimed in claim 1, wherein the at least one reader
5 unit is provided to a path for introduction of the dishes to the body.

[Claim 7] A method for controlling a dishwasher comprising:
a first step of determining positions of dishes on a plurality of racks in a washing
chamber;
10 a second step for setting a spray condition of washing water according to a
distribution of the dishes; and
a third step of operating the dishwasher according to the set spray condition.

[Claim 8] The method as claimed in claim 7, wherein the second step includes the
15 step of setting a spray condition of washing water such that more washing water is sprayed
to a rack having more dishes placed thereon with reference to amounts of dishes on the
plurality of racks.

[Claim 9] The method as claimed in claim 7, wherein the second step includes the
20 step of setting a spray condition of washing water such that washing water is sprayed to
the racks in proportion to amounts of dishes respectively placed thereon with reference to
amounts of dishes on the plurality of racks, respectively.

[Claim 10] The method as claimed in claim 7, wherein the first step further includes the steps of;

sensing kinds and positions of dishes on at least one rack,

comparing the kinds and positions of the dishes sensed thus to preset information

5 on positions of dishes suitable to kinds of dishes, and

informing a positioning error of the dish if the dish is positioned improperly.

[Claim 11] A method for controlling operation a dishwasher comprising:

a first step of sensing information on dishes on at least one rack;

10 a second step of setting an operation condition according to the information on the dishes sensed thus; and

a third step of performing washing of the dishes according to the operation condition set thus.

15 [Claim 12] The method as claimed in claim 11, wherein the first step includes the step of sensing at least one kind of information on kinds of the dishes, main use of the dishes, use of the dishes served, shapes of the dishes, and positions of the dishes placed.

[Claim 13] The method as claimed in claim 11, wherein the second step includes
20 the step of setting at least one of operation conditions of whether a soaking cycle is to be performed or not, a washing time period, whether washing water is used again, or not.

[Claim 14] The method as claimed in claim 11, wherein the second step includes

the step of setting to perform a soaking cycle before a dish washing cycle is performed, if the dish on the rack is a dish for putting food which is liable to stick.

[Claim 15] The method as claimed in claim 11, wherein the second step includes
5 the step of setting a long washing time period, if the dish on the rack is a dish of which main use or use served is for putting food which is liable to stick, and setting a short washing time period, if the dish on the rack is a dish of which main use or use served is for putting food which is not liable to stick.

10 [Claim 16] The method as claimed in claim 11, wherein the second step includes the step of setting such that the washing water is not re-used, if the dish on the rack is a dish of which main use is for putting food which is liable to contaminate the washing water.

[Claim 17] A method for controlling operation of a dishwasher comprising:
15 a first step of sensing information on dishes placed on a rack;
a second step of determining a kind of detergent with reference to the information on dishes sensed thus; and
a third step for expressing the kind of detergent determined thus to a user.

20 [Claim 18] The method as claimed in claim 17, wherein the third step includes the step of displaying the kind of detergent on a screen of a display.

[Claim 19] The method as claimed in claim 17, wherein the third step includes the

step of presenting the kind of detergent with a voice through a speaker.